



# ENERGY ASSURANCE DAILY

Monday Evening, February 13, 2017

## Major Developments

---

### **Update: Fire Extinguished from Phillips 66 NGL Pipeline in Louisiana February 13; Impacted NGL Fractionator and Natural Gas Processing Plants Remain Shut or Restricted; Offshore Production Resumes by February 12**

Phillips 66 reported the fire from a natural gas liquid (NGL) pipeline at its Paradis Pipeline Station near New Orleans, Louisiana was extinguished by 8:15 a.m. EST, Monday. An explosion from the pipeline occurred at approximately 8:00 p.m. EST, Thursday, February 9 while six workers were conducting routine maintenance at the pump station. The incident resulted in the hospitalization of two workers and one fatality. Phillips 66 said the pipeline remains shut down as the extent of the damage is evaluated and the cause of the fire is investigated. The affected pipeline carries y-grade, a mixture of NGLs such as propane and butane, from Targa Resources' 750 MMcf/d Venice natural gas processing plant to Paradis, where Williams Co. operates a 32,000 b/d NGL fractionator. The shutdown impacted oil and natural gas production as well as natural gas processing upstream of the incident location:

- **Targa Resources** notified Enbridge that it was restricting deliveries, effective gas day February 10, to the Venice gas plant from Enbridge's Mississippi Canyon Gas pipeline, which gathers offshore production from the Gulf of Mexico. Deliveries to Venice fell to 60 MMcf/d on Monday from an average of 265 MMcf/d over the past 30 days, according to Reuters data. A force majeure for deliveries to the Venice gas plant remains in effect until further notice.
- **Mississippi Canyon Gas Pipeline (Enbridge)** notified shippers on Friday, February 11 of the availability of alternative flow paths to third-party offshore delivery points. Effective gas day February 11 and until further notice, shippers can nominate a total of 40 MMcf/d to the Kinetica Energy Express delivery point. The company said it would notify shippers when capacity becomes available at the High Point Gas Transmission delivery point.
- **Discovery Gas Transmission (DGT) (Williams Co.)** on Friday said it had shut the Paradis fractionator and had curtailed shippers on its DGT pipeline, which gathers offshore production from the Gulf of Mexico and sends it to Williams' 600 MMcf/d Larose Gas Plant in Louisiana. The Larose gas plant sends NGLs separated at the plant to the Paradis fractionator for processing and sends out pipeline-quality gas to several pipeline systems. In order to bypass the Larose plant, DGT notified shippers late on Friday, February 11 of the availability of alternative flow paths to third-party offshore delivery points, including the Sea Robin Emergency Outlet, the Transco system, and the Kinetica Energy Express system, totaling to 375 MMcf/d of takeaway capacity, effective gas day February 12 and until further notice.
- Due to the loss of gas processing facilities in Louisiana, **Texas Eastern Transmission** shut in receipts, effective gas day February 11 and until further notice, at offshore Gulf of Mexico receipt points operated by Anadarko Petroleum, ExxonMobil, Shell, ENI, and other offshore producers.
- **Anadarko Petroleum Corp.** resumed production at its Lucius and Heidelberg offshore Gulf of Mexico facilities by Sunday, February 12. Production from the facilities will be ramped up as third-party pipelines allow. Anadarko shut both facilities following the fire, according to a company notice. Production from the fields is normally transported on the DGT pipeline system through connecting carriers.

<http://www.piersystem.com/go/doc/6522/2180362>

<http://www.enbridge.com/Informational-Postings/Mississippi-Canyon/Notices/Critical.aspx>

<http://discovery.williams.com/notices.jsp?type=c>

<http://www.anadarko.com/News/Flash-Feed/Gulf-of-Mexico-Update/>

Reuters, 09:01 February 13, 2017

**Power Restoration Continues after Storms, High Winds Move across Central, Northeast U.S. February 12 – 13**

Strong storms bringing high winds, thunderstorms, and snow moved across central and northeast U.S. states on Sunday with affects lasting into Monday, knocking out power to at least 131,015 customers. As of 3:30 p.m. EST on Monday, 25,997 customers remained without power. Wind gusts of up to 73 mph were reported knocking down trees and powerlines. Consumers Energy reported approximately 100 power lines were affected by fallen trees resulting from the heavy gales. DTE, which reported 25,000 customer outages, said power was fully restored by 3:00 p.m. EST on Monday. The table below shows total affected customers and the latest reported outages by utility. The “Affected” column shows the total count of customers that lost power at one point or another over the course of the storm for each utility. These outages may not have occurred concurrently and are not the same as peak outages.

| <b>Central and Northeast U.S. Customer Power Outages</b> |              |                 |                        |
|--|--------------|-----------------|------------------------|
| February 12 – 13, 2017                                   |              |                 |                        |
| <b>Electric Utility</b>                                  | <b>State</b> | <b>Affected</b> | <b>Latest Reported</b> |
| Pepco  | DC           | 5,265           | 441                    |
| Baltimore Gas and Electric                               | MD           | 12,000          | 513                    |
| DTE  | MI           | 25,000          | 0                      |
| Consumers Energy   | MI           | 9,700           | 13                     |
| Central Hudson   | NY           | 14,881          | 13,662                 |
| FirstEnergy  | OH           | 7,000           | 808                    |
| Duquesne Light Co  | PA           | 12,000          | 1,821                  |
| PECO   | PA           | 5,300           | 4,947                  |
| Dominion Power   | VA           | 34,000          | 3,789                  |
| Shenandoah Valley Electric Cooperative                   | VA           | 5,869           | 3                      |
| <b>TOTAL *</b>   |              |                 | <b>25,997</b>          |

\*Total outages represent only electric utilities listed in this table.

Sources:

- <http://www.pepco.com/pages/connectwithus/outages/outagemaps.aspx>
- <https://outagemap.bge.com/>
- [https://twitter.com/dte\\_energy](https://twitter.com/dte_energy)
- <https://stormcentral.cenhud.com/>
- <https://www.duquesnelight.com/outages/current-outages>
- <https://www.peco.com/Outages/CheckOutageStatus/Pages/OutageMap.aspx>
- <http://outagemap.dom.com.s3-website-us-east-1.amazonaws.com/external/report.html?report>
- <http://www.outageentry.com/dvOSM/dvOutages.php?Client=svec>
- [http://www.mlive.com/news/grand-rapids/index.ssf/2017/02/west\\_michigan\\_under\\_wind\\_advis.html](http://www.mlive.com/news/grand-rapids/index.ssf/2017/02/west_michigan_under_wind_advis.html)
- <http://www.thetimesherald.com/story/news/local/2017/02/12/power-outages-reported-strong-winds>
- <http://www.dailyfreeman.com/general-news/20170213/wind-knocks-out-power-to-almost-15000-central-hudson-customers>
- <https://www.arlnow.com/2017/02/12/thousands-without-power-in-arlington/>
- <http://www.baltimoresun.com/news/weather/weather-blog/bs-md-monday-weather-20170214-story.html>
- <http://wjla.com/news/local/strong-winds-knock-out-power-for-many-in-dc-area>
- <http://www.newsleader.com/story/news/local/2017/02/13/high-winds-cause-power-outages/97843602/>
- [http://www.cleveland.com/metro/index.ssf/2017/02/wind\\_advisory\\_in\\_effect\\_in\\_nor.html](http://www.cleveland.com/metro/index.ssf/2017/02/wind_advisory_in_effect_in_nor.html)
- <http://philadelphia.cbslocal.com/2017/02/13/dangerous-winds-whip-around-the-delaware-valley/>

## **PG&E Dismantles, Removes Two Transmission Towers in Path of Oroville Dam Emergency Spillway in Northern California February 10**

Pacific Gas & Electric (PG&E) crews and contracted helicopter operators on Saturday were continuing to dismantle and remove two transmission towers in the path of an emergency spillway at the Oroville dam in Northern California. Customer electric service was not expected to change, PG&E said. The emergency spillway is a contingency plan in case further erosion continues on the controlled spillway, which was found to have chunks of concrete missing on it earlier this week. The California Department of Water Resources (DWR) on Sunday issued evacuation orders for residents due to erosion at the head of the auxiliary spillway that threatens to undermine the concrete weir and allow large, uncontrolled releases of water from Lake Oroville. To avert more erosion at the top of the auxiliary spillway, DWR doubled the flow down its main spillway from 55,000 cubic feet per second (cfs) to 100,000 cfs.

[http://www.water.ca.gov/news/newsreleases/2017/021217-pm\\_release\\_oroville\\_evacuation.pdf](http://www.water.ca.gov/news/newsreleases/2017/021217-pm_release_oroville_evacuation.pdf)

[https://twitter.com/PGE\\_Paul/status/830182177400770565](https://twitter.com/PGE_Paul/status/830182177400770565)

<http://fox40.com/2017/02/10/pg-e-crews-dismantle-towers-in-path-of-emergency-spillway-at-oroville-dam/>

## **Update: Entergy's 653 MW Pilgrim Nuclear Unit 1 in Massachusetts Restarts February 12, Ramps Up to 20 Percent by February 13**

Entergy on February 9 preemptively shut its Pilgrim nuclear power station due to an impending snowstorm. Power station officials said the decision was based upon an updated weather forecast and in accordance with station operating procedure. The plant has been operating at 30 percent power since February 6 when a small seawater leak was identified in one condenser tube and subsequently repaired, according to a spokesperson. Pilgrim proactively decided to plug additional tubes to prevent this type of issue in the future, the spokesperson added.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

[https://twitter.com/PilgrimNuclear/status/829719282837835777?ref\\_src=twsrc%5Etfw](https://twitter.com/PilgrimNuclear/status/829719282837835777?ref_src=twsrc%5Etfw)

<http://www.fox25boston.com/news/pilgrim-nuclear-power-station-shuts-down-ahead-of-storm/492524571>

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

## **Update: Exelon's 1,163 MW Byron Nuclear Unit 1 in Illinois at Full Power by February 11**

On the morning of February 10 the unit was operating at 71 percent, reduced from full power on February 9.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

## **Update: DTE's 1,089 MW Fermi Nuclear Unit 2 in Michigan Ramps Up to 92 Percent by February 11**

On the morning of February 10 the unit was operating at 74 percent, reduced from full power on February 5.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

## **Update: Entergy's 858 MW Arkansas Nuclear Unit 2 in Arkansas Ramped Up to 96 Percent by February 13**

On the morning of February 12 the unit was operating at 81 percent, reduced from 96 percent on January 29.

<http://www.nrc.gov/reading-rm/doc-collections/event-status/reactor-status/2017/>

## **Alta Wind's 168 MW Pinyon Pines Wind Unit 1 in California Shut by February 12**

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201702121515.html>

## **Sacramento Municipal Utility District's 128 MW Solano Wind Unit in California Shut by February 12**

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201702121515.html>

## **Update: NCPA's 247 MW Collierville Hydro Unit 1 & 2 in California Returns to Service by February 11**

The unit returned from an unplanned outage that began on February 10.

<http://content.caiso.com/unitstatus/data/unitstatus201702111515.html>

## **PG&E's 407 MW Helms Hydro Unit 1 in California Shut by February 11**

The unit entered an unplanned outage.

<http://content.caiso.com/unitstatus/data/unitstatus201702111515.html>

## **Update: Alta Wind's 132 MW Pinyon Pines Wind Unit 2 in California Returns to Service by February 10**

The unit returned from an unplanned outage that began on February 9.

<http://content.caiso.com/unitstatus/data/unitstatus201702101515.html>

## **CDWR's 933 MW Hyatt-Thermalito Hydro Unit in California Reduced by February 10**

The unit entered an unplanned curtailment of 398 MW.

<http://content.caiso.com/unitstatus/data/unitstatus201702101515.html>

## **Avangrid Renewables Announces Its 200 MW Amazon Wind Farm US East in North Carolina Fully Operational February 9**

Avangrid Renewables on Friday announced its Amazon Wind Farm US East in North Carolina reached full commercial operation in February and began delivering power in December 2016. Construction on the wind farm, which features 104 wind turbines, began in 2015.

[http://www.avangridrenewables.us/rel\\_17.02.09.html](http://www.avangridrenewables.us/rel_17.02.09.html)

<https://www.iberdrola.com/about-us/lines-business/facilities-map>

## ***Petroleum***

---

### **Phillips 66 Reports Acid Leak at Its 101,000 b/d Ferndale, Washington Refinery February 10**

Six contract workers and one Phillips 66 worker were taken to the hospital on Friday after a hydrofluoric acid leak at Phillips 66's Ferndale refinery in Washington, local media reported. The hydrofluoric acid release forced workers at the refinery to shelter indoors for about an hour, the company said. The seven workers were treated for exposure to hydrofluoric acid, which can be fatal. One contract worker remained hospitalized on Saturday. A planned overhaul of the refinery had begun last Wednesday. The leak was from the refinery's alkylation unit, according to a company statement. Alkylation units use hydrofluoric acid to convert refining byproducts into octane-boosting components of gasoline. Alkylation units are considered the most dangerous in a refinery because a release of hydrofluoric acid from an explosion or fire could spread a possibly lethal vapor cloud across surrounding communities. The South Coast Air Quality Management District, which regulates pollutants in the Los Angeles area, has proposed banning the substance. A 2015 explosion at PBF's (then owned by ExxonMobil Corp) Torrance, California refinery was found to have nearly released hydrofluoric acid into the atmosphere. A November 22 explosion at an alkylation unit injured four people at ExxonMobil Corp's refinery in Baton Rouge, Louisiana.

Reuters, 2:58 February 11

Reuters, 19:57 February 11

### **Phillip 66 Reports Process Unit Upset at its 336,000 b/d Wood River, Illinois Refinery February 11**

Phillip 66 reported a process unit upset at its Wood River refinery on February 11, according to a filing with the Illinois Emergency Management Agency.

Reuters, 4:14 February 13, 2017

### **Update: Valero Restarts HCU at Its 125,000 b/d Meraux, Louisiana Refinery February 10**

Valero Energy Corp said it restarted the 55,000 b/d hydrocracking unit (HCU) at its Meraux, Louisiana refinery on Friday. The unit was operating at a minimum production level, said sources familiar with plant operations. The HCU will run at minimum production while repairs are performed on a compressor damaged in a fire, which occurred last Wednesday, the sources said.

Reuters, 14:28 February 10, 2017

### **Update: FCCU Running at 84 Percent Capacity at Total's 225,500 b/d Port Arthur, Texas Refinery February 13**

Total SA reported the 76,000 b/d fluidic catalytic cracking unit (FCCU) was running at 84 percent capacity on Monday, sources familiar with plant operations said. The FCCU returned to production on February 9 following a fire on February 7, and the refinery had cut back production to 140,000 b/d due to the FCCU outage.

Reuters, 15:11 February 13, 2017

### **Apache Shuts Its Alpine High, Texas Well after Fire Reported on Work Site February 9**

Apache Corp on Thursday shut in a well in Reeves, County, Texas, as a precaution after the cab of a tractor-trailer caught fire on site, a spokeswoman for the company said. There were no injuries and the fire was extinguished, according to the spokeswoman. The incident occurred at the company's Alta location north of I-10, in Apache's recent Alpine High discovery in West Texas. Apache said the well has been producing at the time and would be back within a couple of hours. A bystander reported a thick plume of smoke reaching about 20 feet high.  
Reuters, 15:55 February 9, 2017

### **Update: Judge Denies Native American Tribes' Request to Block Final Link in Energy Transfers' Dakota Access Pipeline February 13**

A U.S. federal judge on Monday denied a request from the Standing Rock Sioux and Cheyenne River Sioux tribes seeking a halt to construction of the final link in Energy Transfer Partners' 1,170-mile Dakota Access Pipeline. The tribes had argued that the project will prevent them from practicing religious ceremonies at a lake they say is surrounded by sacred ground. Construction on the final uncompleted stretch was proceeding after the U.S. Army Corps of Engineers last week granted a final easement to Energy Transfer. The company only needs to build a final 1,100-foot connection in North Dakota under Lake Oahe, part of the Missouri River system, to complete the pipeline. The line is set to run from oilfields in the Northern Plains of North Dakota to the Midwest, and then to refineries along the Gulf of Mexico, and could be operating by early May.  
Reuters, 15:43 February 13, 2017

### **MPLX to Purchase Enbridge's 230,000 b/d Ozark Pipeline from Oklahoma to Illinois February 13**

MPLX LP, a subsidiary of Marathon Petroleum Corp, announced that it entered into an asset purchase agreement with Enbridge to purchase the Ozark Pipeline for approximately \$220 million. The Ozark pipeline is a 433-mile, 22-inch crude oil pipeline originating in Cushing, Oklahoma, and terminating in Wood River, Illinois, capable of transporting approximately 230,000 b/d. MPLX also announced that an open season recently conducted by Enbridge received sufficient long-term volume commitments to plan an expansion of the pipeline's capacity to approximately 345,000 b/d. The expansion project design includes increasing the horsepower at pump stations along the pipeline and adding drag-reducing agents to the crude oil. The expansion project is expected to be complete in the second quarter of 2018. The purchase transaction is expected to close in the first quarter of 2017, subject to customary closing conditions, including regulatory approvals.

<http://phx.corporate-ir.net/phoenix.zhtml?c=251401&p=irol-newsArticle&ID=2245401>

### **Noble, Plains All American Announce Pipeline Joint Venture to Acquire Advantage Pipeline in Delaware Basin February 13**

Noble Midstream Partners and Plains All American announced today that they have entered into definitive agreements to form a 50/50 joint venture (JV) to acquire Advantage Pipeline, LLC's 70-mile, 16-inch Advantage Pipeline located in the southern Delaware Basin. The Advantage Pipeline, constructed in 2013, has 150,000 b/d of shipping capacity from Reeves County, Texas to Crane County, Texas. The Advantage system also includes approximately 490,000 barrels of combined crude storage at three separate trucking stations in Reeves, Pecos, and Crane Counties. The JV will acquire Advantage for \$133 million. Noble Midstream will serve as the operator, and will construct a wholly owned 15-mile pipeline to deliver crude oil to the Advantage Pipeline from its first central gathering facility. Plains will construct a pipeline to connect its Wolfbone Ranch facility to the Advantage Pipeline near Highway 285. The connections are estimated to be completed in the second quarter of this year.

<http://ir.paalp.com/profiles/investor/ResLibraryView.asp?ResLibraryID=83010&GoTopage=1&Category=117&BzID=789&G=549>

Reuters, 7:00 February 13, 2017

## ***Natural Gas***

---

### **Dominion's 750 MMcf/d Crayne Station in Pennsylvania Returns to Normal Operations February 10 after Unplanned Outage February 9**

Dominion Transmission said its Crayne station returned to normal operations effective start of gas day February 10 after going out of service on February 9 due to an unplanned outage.

[https://dekaflow.dom.com/jsp/info\\_post.jsp?&company=dti#](https://dekaflow.dom.com/jsp/info_post.jsp?&company=dti#)

[http://www.upstreamwestafrica.com/wp-content/uploads/2014/12/Capstone\\_Dominion\\_hires.pdf](http://www.upstreamwestafrica.com/wp-content/uploads/2014/12/Capstone_Dominion_hires.pdf)

## Enbridge Reports Utility Power Failure at Its Pittsburg Gas Plant in Texas February 11

Enbridge reported the temporary shutdown of the SCOT plant when the plant experienced a plugging in the absorber line to the thermal oxidizer, which caused the nose pressure to rise. Inlet rates were cut and when the plugging was removed, the equipment was brought back online. The thermal oxidizer was utilized to mitigate emissions during the event.

<http://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target=252231>

## State Department Review Sees No Adverse Impact from Enbridge's Alberta Clipper Pipeline February 10

After a four-year review, the U.S. State Department on Friday said it does not believe there would be significant negative environmental impact from Enbridge Energy Partners' plan to boost the capacity of an existing 3-mile section of its Alberta Clipper oil pipeline that crosses the U.S. border in northeastern North Dakota. Enbridge asked the State Department in 2012 for a presidential permit to expand the current capacity of the pipeline, which also is known as Line 67, where it crosses the international border from about 450,000 b/d to 800,000 b/d. The State Department is taking public comment on its draft environmental impact statement for 45 days, until March 27. The State Department issues presidential permits for projects that cross the U.S.-Canadian border.

Reuters, 18:31 February 10, 2017

<https://www.state.gov/e/entr/applicant/applicants/202453.htm>

## Other News

---

Nothing to report.

## International News

---

### New Floating Platform at Libya's Bouri Field Loads First Tanker – NOC

A new floating storage and offloading (FSO) platform on Saturday loaded its first tanker with oil from Libya's offshore Bouri field, the National Oil Corporation (NOC) said. The new platform arrived on site in May 2016 and started pumping crude oil at the end of January. The Bouri field is run by Mellitah Oil and Gas Company, a joint venture between NOC and ENI.

Reuters, 14:33 February 12, 2017

### OPEC Reports Large Oil Output Cut by Saudi Arabia in January

The Organization of the Petroleum Exporting Countries (OPEC) reported Saudi Arabia made large crude output cuts in January in compliance with the group's supply reduction deal. OPEC producers agreed to curb output by about 1.2 million b/d from January 1. Russia and 10 other non-OPEC producers agreed to cut half as much. Supply from the 11 OPEC members with production targets under the deal fell to 29.89 million b/d in January, according to figures from secondary sources that OPEC uses to monitor its output. With demand for OPEC crude in 2017 expected to average 32.14 million b/d, the report indicates there will be zero average surplus if OPEC keeps output steady. The January report indicated a 985,000 b/d surplus.

Reuters, 9:11 February 13, 2017

## Energy Prices

---

| U.S. Oil and Gas Prices                   |       |          |          |
|---|-------|----------|----------|
| February 13, 2017                         |       |          |          |
|   | Today | Week Ago | Year Ago |
| <b>CRUDE OIL</b>                          |       |          |          |
| West Texas Intermediate U.S.<br>\$/Barrel | 52.91 | 52.96    | 29.27    |
| <b>NATURAL GAS</b>                        |       |          |          |
| Henry Hub<br>\$/Million Btu               | 2.93  | 3.00     | 2.12     |

Source: Reuters

## Links

---

***This Week in Petroleum*** from the U.S. Energy Information Administration (EIA)

<http://www.eia.gov/oog/info/twip/twip.asp>

Updated every Wednesday.

***Weekly Petroleum Status Report*** from EIA

[http://www.eia.gov/oil\\_gas/petroleum/data\\_publications/weekly\\_petroleum\\_status\\_report/wpsr.html](http://www.eia.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html)

Updated after 10:30 AM & 1:00 PM ET every Wednesday.

***Natural Gas Weekly Update*** from EIA

<http://www.eia.gov/oog/info/ngw/ngupdate.asp>

Updated after 2:00 PM ET every Thursday.

### **ENERGY ASSURANCE DAILY**

---

*Energy Assurance Daily* provides a summary of public information concerning current energy issues. Published Monday through Friday to inform stakeholders of developments affecting energy systems, flows, and markets, it provides highlights of energy issues rather than a comprehensive coverage. *Energy Assurance Daily* is updated online Monday through Friday after 5:00 p.m. ET. For more information, visit the Infrastructure Security and Energy Restoration (ISER) website at:

<http://www.oe.netl.doe.gov/ead.aspx>

Please direct comments and questions to: [ead@oe.netl.doe.gov](mailto:ead@oe.netl.doe.gov)